

REMARKS

Claims 1-19, which were withdrawn due to a restriction requirement, are herewith canceled without prejudice or disclaimer thereto. Applicants intend to pursue these claims in divisional applications. Claims 20-22 remain pending in the application. Support for amended claims 20 and 22 is found throughout the specification as originally filed, *inter alia*, on page 10, lines 1-5, page 13, lines 10-26 and on pages 23-28. Accordingly, Applicants assert that no new matter is introduced into the specification through entry of the present claim amendments.

Claim Objections under MPEP 2173.05(s)

Claim 20 was objected to under MPEP 2173.05(s). The Examiner asserted that, by incorporating by reference Tables 2-4, claim 20 was not defined clearly (page 10-11). In Applicants previous response, claim 20 was amended to remove the phrase "an agent capable of antagonizing, inhibiting or otherwise interfering with the function or expression of a protein or polypeptide as defined in Tables 2-4." In a telephone interview with the Examiner on February 20, 2004, the Examiner indicated that the objection would be withdrawn in light of the previous amendment.

Claim Rejections under 35 U.S.C. § 112, second paragraph

Claim 20 was rejected under 35 U.S.C. § 112, second paragraph on the grounds that the recitation of "capable of" was vague. In Applicants previous response, claim 20 was amended to remove the "capable of" language. In a telephone interview with the Examiner on February 20, 2004, the Examiner indicated that the rejection would be withdrawn in light of the previous amendment.

Claim Rejections under 35 U.S.C. § 112, first paragraph

Claims 20-22 stand rejected under 35 U.S.C. § 112, first paragraph on the grounds that the specification does not reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

The Examiner stated in the final Office Action that claim 20 reads on any use of SEQ ID NO: 162 (page 5). The Examiner acknowledged that mice vaccinated with a protein of SEQ ID NO: 162 survived longer than the control mice, but asserted that the

mice are not protected from infection as claimed (page 5). The Examiner also asserted that agents capable of antagonizing, inhibiting, or otherwise interfering with the function or expression of any protein or polypeptide as defined in Tables 2-4 except SEQ ID NO: 162 are not adequately described in the specification (pages 5-6).

Claims 20-22 also stand rejected under 35 U.S.C. § 112, first paragraph on the grounds that the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with the claims. The Examiner asserted that the specification provides no working examples demonstrating enablement for *in vivo* uses of any agents other than SEQ ID NO: 162 capable of antagonizing, inhibiting, or otherwise interfering with the function or expression of a protein or polypeptide as defined in Tables 2-4 (pages 7-8). The Examiner also asserted that the mice administered with SEQ ID NO: 162, which survived longer than control mice, were not protected from infection as claimed (page 8). The Examiner asserted that it was thus unclear whether this approach is feasible in preventing *S. pneumoniae* infection (page 8).

In Applicants previous response, claim 20 was amended to remove the phrase "an agent capable of antagonizing, inhibiting or otherwise interfering with the function or expression of a protein or polypeptide as defined in Tables 2-4." In a telephone interview with the Examiner on February 20, 2004, the Examiner indicated that the amendment overcame the rejection for lack of written support and/or enablement for agents other than SEQ ID NO: 162 because amended claim 20 was limited to a polypeptide of SEQ ID NO: 162. However, the Examiner reiterated her concern that the specification did not support claims directed to preventing *S. pneumoniae* infection.

Applicants presently amend claim 20 to replace the phrase "A method for treatment or prophylaxis" with the phrase "A method for prophylactic treatment." Applicants also replace the phrase "administering to a patient in need thereof a polypeptide of SEQ ID NO:162" with the phrase "delivering to a patient in need thereof an isolated polypeptide comprising the amino acid sequence of SEQ ID NO:162." An "isolated polypeptide" is a polypeptide delivered separate from the milieu of the bacterium in which it occurs in nature. These amendments are in no way a disclaimer of

the full scope of the invention, and Applicants reserve the right to pursue the full scope of the invention in divisional applications.

In several telephone interviews with the Examiner since February 20, 2004, Applicants' counsel respectfully submitted that the specification provides both written support and enablement for the claims as currently amended. In particular, pages 23-28 of the specification describe vaccine trials in which protective polypeptides were delivered to mice via immunization with nucleic acid sequences encoding the amino acid sequence of SEQ ID NO:162. Two out of six mice immunized with the nucleic acid sequences encoding isolated polypeptides of SEQ ID NO:162 were protected from the development of symptoms associated with the onset of *S. pneumoniae* induced-disease. Thus, the polypeptides protected the immunized mice against the deleterious effects of the bacteria for a measurable period of time as compared to control mice. This indicates that the polypeptides of the invention indeed are suitable for prophylactic treatment of *S. pneumoniae* infection.

In a telephone interview with the Examiner on March 10, 2004, the Examiner indicated that the rejection of claim 20 would be withdrawn in light of the present amendments.

Applicants presently amend claim 22, which depends from claim 20, to recite that delivery of the polypeptide is via a nucleic acid sequence encoding the amino acid sequence of SEQ ID NO:162. In a telephone interview with the Examiner on March 10, 2004, the Examiner indicated that the rejection of claim 22 would be withdrawn in light of the present amendments.

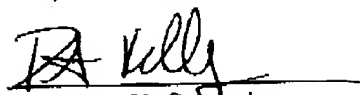
CONCLUSION

In view of the foregoing amendments, Applicants respectfully submit that claims 20-22 are adequately supported by the specification and enable one of ordinary skill in the art to make and use the invention commensurate in scope with the claims. Furthermore, Applicants believe that incorporation of the amendments and consideration of the above remarks have placed this application in a condition for allowance. Early notification of a favorable consideration is respectfully requested.

Respectfully submitted,

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By:


Laurence H. Posorske
Registration No. 34,698
David A. Kelly
Registration No. 53,106

HUNTON & WILLIAMS
1900 K Street, N.W.
Suite 1200
Washington, D.C. 20006-1109
Telephone: (202) 955-1960
Facsimile: (202) 778-2201